

When extra-role becomes expected: Organizational citizenship behaviour as a boundary condition in the coach–athlete interaction–burnout link

 **Acelya Telli**  . Department of Business Administration. Istanbul Esenyurt University. Istanbul, Türkiye.
 **Serdar Bozkurt**. Department of Business Administration. Yildiz Technical University. Istanbul, Türkiye.

ABSTRACT

Coach–athlete interaction represents a central relational resource in team sports and is closely linked to athletes' motivation, psychological well-being, and sustained engagement. Yet, athletes often operate in climates where 'going above and beyond' for the team can be experienced not only as a voluntary contribution but also as an implicit expectation. Building on Leader–Member Exchange (LMX) Theory and research on organizational citizenship behaviour in sport (OCB-S), this study examines (a) whether higher-quality coach–athlete interaction is associated with lower athlete burnout, and (b) whether athletes' OCB functions as a boundary condition in this relationship. Survey data were collected from 250 adult athletes participating in team sports in Türkiye. Using PLS-SEM, the results showed that higher-quality coach–athlete interaction was negatively associated with athlete burnout. Moreover, OCB strengthened the negative association between coach–athlete interaction and burnout, such that the relationship was stronger at higher levels of OCB. These findings suggest that higher-quality coach–athlete interaction is associated with lower athlete burnout, particularly when athletes' extra-role involvement remains meaningful and self-endorsed rather than merely compliant with team norms.

Keywords: organizational citizenship behaviour in sport; leader–member exchange; coach–athlete interaction; athlete burnout; team sports; coaching practice.

Cite this article as:

Telli, A., & Bozkurt, S. (2026). When extra-role becomes expected: Organizational citizenship behaviour as a boundary condition in the coach–athlete interaction–burnout link. *Journal of Human Sport and Exercise*, 21(4), 1380-1394.
<https://doi.org/10.55860/kzbz2s03>

 **Corresponding author.** Department of Business Administration. Istanbul Esenyurt University. Zafer Mahallesi Adile Naşit Bulvarı No:1. 34510 Istanbul, Türkiye.

E-mail: acelyatelli@esenyurt.edu.tr

Submitted for publication April 15, 2026.

Accepted for publication July 21, 2026.

Published August 19, 2026.

Journal of Human Sport and Exercise. ISSN 1988-5202.

©Asociación Española de Análisis del Rendimiento Deportivo. Alicante. Spain.

doi: <https://doi.org/10.55860/kzbz2s03>

INTRODUCTION

In the realm of sports, one essential and universal element underpinning success is interaction—the central mechanism through which team members connect, coordinate, and collaborate. Both interactions among athletes and those between athletes and coaches are critical determinants of athletic performance. High-quality coach–athlete interactions are associated with positive outcomes such as satisfaction, commitment, and engagement with the team. In contrast, lower-quality interactions have been associated with diminished motivation (Cahyono et al., 2023), dissatisfaction and withdrawal from sport (Olsson et al., 2022; Shang & Yang, 2021), and burnout (Deci & Ryan, 2012; Standage & Ryan, 2020; Davis et al., 2023). Such circumstances may also reduce athletes' engagement in voluntary, extra-role behaviours that are often driven by intrinsic motivation. Understanding these relationships is therefore crucial for fostering positive psychological and performance outcomes.

In coaching contexts, athletes' discretionary contributions (e.g., helping teammates, taking on extra training tasks, maintaining a positive attitude) may simultaneously serve as a performance-enhancing resource and a potential stressor. Because team sport environments often involve strong normative expectations and hierarchical authority, athletes can experience 'extra-role' behaviours as partly expected rather than purely voluntary. This ambiguity is important for burnout research: when additional contributions are self-endorsed, they may buffer strain, but when they are driven by obligation, they can intensify exhaustion.

Drawing on Leader–Member Exchange (LMX) Theory, we conceptualize coach–athlete interaction quality as a relational mechanism through which coaches provide support, trust, and respect, shaping athletes' psychological experiences in training and competition. High-quality exchange relationships are expected to foster need satisfaction, engagement, and resilience, whereas low-quality exchanges can increase stress and vulnerability to burnout.

Although the coach–athlete relationship has been widely linked to performance and well-being, less is known about when and for whom relational quality is most strongly associated with lower athlete burnout. Athletes' extra-role involvement—captured here as organizational citizenship behaviour in sport (OCB)—may be one such boundary condition. OCB reflects behaviours that support team functioning beyond formal role requirements; however, in sport settings, these behaviours can be intertwined with implicit expectations and moralized commitment. Accordingly, we examine whether OCB strengthens the association between coach–athlete interaction and burnout.

Using survey data from 250 team-sport athletes in Türkiye, this study investigates the relationship between coach–athlete interaction and athlete burnout and tests OCB as a moderator. By integrating a coaching-specific view of relational quality with contemporary work on citizenship behaviour in sport, the study offers applied insights for coaches seeking to better understand factors associated with athlete burnout while sustaining constructive team contributions.

Literature review and hypothesis development

Coach–athlete interaction and athlete burnout

Leader–athlete interactions are central not only in business contexts but also in sports environments, where they influence both individual and team performance (Gu et al., 2023). The theoretical framework for coach–athlete interaction is grounded in Leader–Member Exchange (LMX) Theory, which focuses on the quality of social interactions between leaders and team members (Graen & Uhl-Bien, 1995; Leduc et al., 2024). Coaches and athletes continuously interact within a team setting, and athletes' satisfaction and perceptions of their coaches depend on interaction quality (Lee et al., 2023; Stephen et al., 2022).

The Coach–Athlete Relationship (CAR) is typically conceptualized along three dimensions: closeness, commitment, and complementarity. Closeness refers to trust, respect, liking, and appreciation between athlete and coach (do Nascimento Junior et al., 2020); commitment reflects a harmonious relationship between the two parties (Simons & Bird, 2023); and complementarity indicates cooperative, reciprocal behaviours (Li et al., 2021). High-quality CAR fosters a harmonious environment, increases athlete motivation, and enhances participation in training, ultimately positively influencing athletic performance (Davis et al., 2018; Foulds et al., 2019; Lee et al., 2023).

Although the coach–athlete relationship has been extensively examined using sport-specific frameworks such as Jowett’s 3+1Cs model (closeness, commitment, complementarity, and co-orientation)(Jowett, 2007), the present study adopts a Leader–Member Exchange (LMX) perspective to conceptualize coach–athlete interaction quality. While these frameworks originate from different research traditions, they share a common relational core. Specifically, the LMX dimensions of trust, loyalty, contribution, and professional respect conceptually overlap with the affective and behavioural components captured by the 3+1Cs model. In this respect, LMX provides a complementary lens that emphasizes exchange-based relational processes and perceived reciprocity within hierarchical relationships. Given the structured and authority-based nature of coach–athlete dynamics in team sports, LMX offers a suitable framework for capturing how relational quality functions as a resource influencing athlete outcomes such as burnout (Jowett, 2007; Graen & Uhl-Bien, 1995).

Burnout represents a major threat in both individual and team sports, characterized by emotional and physical exhaustion, depersonalization, and reduced accomplishment (Wilczyńska et al., 2022; Raedeke & Smith, 2001). Studies demonstrate that insufficient coach support significantly increases burnout levels, while high-quality interactions help mitigate it (Fan et al., 2023; Brown & Roloff, 2015; Buyukbasmaci, 2024; Dixon, 2021; Li et al., 2024; Nicholls et al., 2022). Based on this evidence, the first hypothesis is proposed:

H₁: Coach–athlete interaction is negatively associated with athlete burnout.

The moderating role of OCB

Organizational Citizenship Behaviour (OCB) refers to discretionary behaviours that are not formally required or rewarded, which also manifest in sports settings (Kim et al., 2022). In sports, OCB includes actions such as sharing knowledge with teammates, participating in extra training sessions, organizing team activities, and supporting team cohesion (Chelladurai, 2006; Podsakoff et al., 2000; Fletcher & Wagstaff, 2009; Jabeen et al., 2021).

Importantly, the meaning of ‘citizenship’ in sport is not always straightforward. Because coaches hold substantial authority and team cultures may valorise sacrifice, athletes can perceive extra-role behaviours as expected demonstrations of commitment. This can create a grey zone between truly discretionary contribution and compliance with normative demands—an issue with direct implications for burnout and wellbeing.

In sports contexts, a unique OCB dimension—sportsmanship—emerges due to the high authority of coaches and normative expectations for athletes to comply with instructions (Stirling & Kerr, 2009). Unlike employees in non-sport organizations, athletes may experience uncertainty regarding which behaviours are truly voluntary versus expected, creating a “grey area” in OCB assessment (Love & Kim, 2019; Kim et al., 2022). Kim et al.’s (2022) OCB-S scale, used in the present study, includes five subdimensions: bonding, community service, encouraging, extra work, and helping, reflecting voluntary behaviours that strengthen team dynamics and performance (Güner & Işık, 2023).

From an LMX perspective, athletes are more likely to engage in OCB when they have a high-quality relationship with their coach, as relational support exceeds baseline expectations. Prior research confirms that insufficient coach support correlates with lower OCB levels, while transformational, autonomy-supportive, or democratic coaching styles positively affect both CAR and OCB (Dekas et al., 2013; Eby et al., 2015; Ellinger & Cseh, 2007; Jin et al., 2022; Choi et al., 2020). High-quality interactions satisfy athletes' psychological needs, increase positive outcomes, and reduce negative outcomes such as burnout (Davis et al., 2023; Fan et al., 2023).

However, the relationship between OCB and burnout may be contingent on whether extra-role contributions are experienced as self-endorsed or as obligations. When OCB reflects authentic team-oriented engagement, it may function as a resource that amplifies the protective role of coach–athlete interaction. Consistent with a boundary-condition approach, we therefore test whether OCB moderates the link between coach–athlete interaction and athlete burnout.

H₂: Athletes' organizational citizenship behaviours moderate the relationship between coach–athlete interaction and athlete burnout, such that the negative association is stronger when OCB is higher.

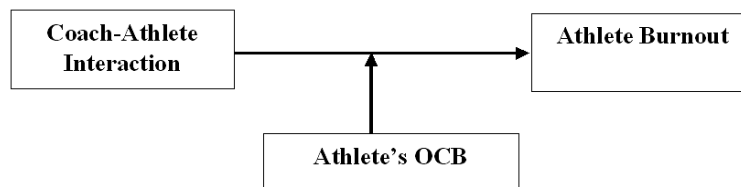


Figure 1. Research model.

METHODOLOGY

Participants

The population of the research consists of individuals aged 18 and above who are involved in team sports in Türkiye. While exact data on the total number of eligible individuals aged 18 and above participating in team sports in Türkiye was not available, the sample size was designed to meet generally accepted adequacy criteria for quantitative studies in the social sciences. Therefore, the sample of the study consists of 250 volunteer athletes (no distinction was made between licensed and unlicensed athletes) from Türkiye who completed the online questionnaire via Google Forms. Participants were selected using the convenience sampling method, as collecting data online via Google Forms voluntarily conflicts with random sampling.

Scales

A survey method was employed for data collection. Survey data were gathered online via Google Forms, following the approval of the Istanbul Esenyurt University Ethics Committee (Approval No. 2025/01). The survey included demographic questions (4 items), items from the Leader–Member Exchange (LMX) Scale, the Athlete Burnout Questionnaire (ABQ), and the Organizational Citizenship Behaviour in Sports (OCB-S) Scale. In total, the survey consisted of 51 items. Detailed information regarding the scales and demographic questions utilized in the research is provided below:

- *Leader–Member Exchange (LMX) Scale*: Developed by Liden and Maslyn (1998), the Turkish reliability and validity study was conducted by Baş et al. (2010). This scale comprises 12 items distributed across four sub-dimensions: Impact, Loyalty, Contribution, and Professional Respect.

- *Athlete Burnout Questionnaire (ABQ)*: Developed by Raedeke and Smith (2001, 2009), with its Turkish reliability and validity study conducted by Kelecsek et al. (2016). The ABQ contains 13 items across three sub-dimensions: Reduced Sense of Accomplishment, Emotional/Physical Exhaustion, and Devaluation.
- *Organizational Citizenship Behaviour in Sports Scale (OCB-S)*: Developed by Kim et al. (2022), and its Turkish adaptation and validity study were conducted by Güner and Işık (2023). This scale consists of 22 items across five sub-dimensions: Bonding, Community Service, Encouraging, Extra Work, and Helping.

These scales were selected due to their established reliability and validity in both international and Türkiye contexts, providing a robust framework to examine coach–athlete interactions, athlete burnout, and OCB in sports settings.

RESULTS

Of the 250 individuals participating in the research, 56.4% (141) are men and 43.6% (109) are women. Considering the age range, it is evident that the majority of participants in the research (76.8%, 192 people) fall within the 18-27 age group. The sports branches that the participants of the research are most interested in are football, with 31.2% (78 people), volleyball, with 30% (75 people), and basketball, with 20.8% (52 people). When the participants were asked how many years they had been engaged in the type of sports they declared, 27.2% (68 people) said 5-10 years, 26.4% (66 people) said 10 years or more, and 23.2% (58 people) had been engaged in a certain type of sports for 1-3 years.

Reliability and validity analysis

Reliability and validity analyses were conducted for each scale before hypothesis testing. Cronbach's Alpha and composite reliability values (ρ_a and ρ_c) indicate that the scales demonstrate satisfactory reliability for this study ($\alpha > .70$) (George & Mallery, 2003). Also, AVE values indicated acceptable convergent validity for most constructs. Although the AVE value for Athlete Burnout was slightly below the recommended threshold of 0.50, its composite reliability exceeded 0.90, suggesting that the construct still demonstrates adequate internal consistency and convergent validity (Hair et al., 2021).

Table 1. Construct validity and reliability analysis findings.

	Cronbach Alpha	ρ_a	ρ_c	AVE
LMX	.947	.951	.954	.636
OCB in sports	.973	.978	.975	.636
Athlete burnout	.901	.914	.909	.439

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. Results indicate a low-to-moderate positive correlation (.283) between Athlete Burnout and LMX, a moderate correlation between OCB in Sports and LMX, and a low correlation between Athlete Burnout and OCB in Sports (Table 2).

Table 2. Discriminant validity (HTMT) analysis.

	Athlete burnout	LMX	OCB in sports
LMX	.283		
OCB in sports	.179	.502	
OCB in sports x LMX	.153	.276	.340

Factor analysis*Athlete Burnout Questionnaire*

Confirmatory factor analysis revealed that the Athlete Burnout Questionnaire retained its three original sub-dimensions, consistent with both the original and Turkish adaptation (Kelecsek et al., 2016; Raedeke & Smith, 2001).

Table 3. Factor loadings of the Athlete Burnout Questionnaire.

Factor	Item	Loading	p
Decreased sense of accomplishment	20	.712	.000
	22	.737	.000
	27	.621	.000
	28	.509	.000
Emotional/physical exhaustion	17	.479	.000
	19	.631	.000
	23	.763	.000
	25	.667	.000
	26	.670	.000
Depersonalization	18	.680	.000
	21	.731	.000
	24	.652	.000
	29	.629	.000

Leader-Member Exchange (LMX) Scale

Factor analysis confirmed the original four sub-dimensions, with all items loading appropriately (Baş et al., 2010; Dienesch & Liden, 1986).

Table 4. Factor loadings of the LMX Scale.

Factor	Item	Loading	p
Impact	5	.852	.000
	6	.832	.000
	7	.880	.000
Loyalty	8	.691	.000
	9	.787	.000
	10	.776	.000
Contribution	11	.775	.000
	12	.703	.000
	13	.723	.000
Professional respect	14	.825	.000
	15	.835	.000
	16	.866	.000

OCB in Sports Scale

Factor loadings confirmed the original five sub-dimensions, with all items appropriately aligned (Güner & Işık, 2023; Kim et al., 2022).

Variance Inflation Factor (VIF) values were calculated to assess multicollinearity. All VIF values were below 10, indicating no concerns about multicollinearity (Hair et al., 2019).

Table 5. Factor loadings of the OCB in sports scale.

Factor	Item	Loading	p
Bonding	30	.806	.000
	31	.843	.000
	32	.815	.000
	33	.780	.000
Community service	34	.721	.000
	35	.720	.000
	36	.744	.000
Encouraging	37	.819	.000
	38	.829	.000
	39	.821	.000
	40	.831	.000
	41	.841	.000
Extra-work	42	.720	.000
	43	.796	.000
	44	.801	.000
	45	.836	.000
	46	.783	.000
Helping	47	.881	.000
	48	.893	.000
	49	.898	.000
	50	.903	.000
	51	.780	.000

Table 6. Collinearity statistics (VIF) analysis findings.

	VIF
LMX → Athlete burnout	1.328
OCB in Sports → Athlete burnout	1.390
OCB in Sports x LMX → Athlete burnout	1.151

Table 7. Model fit.

	Saturated model	Estimated model
SRMR	.083	.085
Chi-square	3.549.410	3.550.601
NFI	.692	.692

Model fit indices indicate an acceptable fit. SRMR values between 0.05 and 0.10 indicate a good model fit, while NFI values below the conventional threshold of 0.90 suggest room for improvement (Hu & Bentler, 1999). Although the NFI value is below the conventional threshold, PLS-SEM studies have noted that model fit indices should be interpreted cautiously, as prediction-oriented models may still yield valid and meaningful results despite lower fit indices (Hair et al., 2019).

Hypothesis testing

Path analysis, as a component of Partial Least Squares Structural Equation Modeling (PLS-SEM), was used to test H1, assessing the relationship between coach-athlete interaction (LMX) and athlete burnout. PLS-

SEM was chosen as an appropriate analytical approach for this study, given its suitability for complex models and its robustness under conditions of non-normal data and moderate sample sizes (Hair et al., 2019).

Results indicate a significant negative association between LMX and athlete burnout ($\beta = -.333, p < .001$), supporting H1. This finding indicates that athletes reporting higher-quality relationships with their coach also tended to report lower levels of burnout. Results further indicated that coach–athlete interaction was positively associated with OCB, while OCB was negatively associated with athlete burnout. Consistent with the theoretical framework and hypotheses of the present study, the primary focus remains on the moderating role of OCB as a boundary condition influencing the association between coach–athlete interaction and athlete burnout.

Another notable finding, as illustrated in Figure 2, is the positive relationship between coach–athlete interaction and OCB in sports ($\beta = 0.373, p < .001$). This suggests that athletes reporting higher-quality relationships with their coaches were also more likely to report organizational citizenship behaviours. Additionally, a negative relationship between OCB in sports and athlete burnout was observed ($\beta = -0.172, p < .01$), indicating that athletes engaging in more OCB experience lower levels of burnout.

Overall, the findings indicate that higher-quality coach–athlete interaction is associated with lower burnout and that athletes' OCB operates as a boundary condition for this association. Specifically, the negative relationship between coach–athlete interaction and burnout was stronger when OCB was higher, consistent with a moderating (interaction) effect. In addition, coach–athlete interaction was positively related to OCB and OCB was negatively related to burnout, suggesting that constructive relational climates coincide with greater team-supportive behaviours and lower burnout.

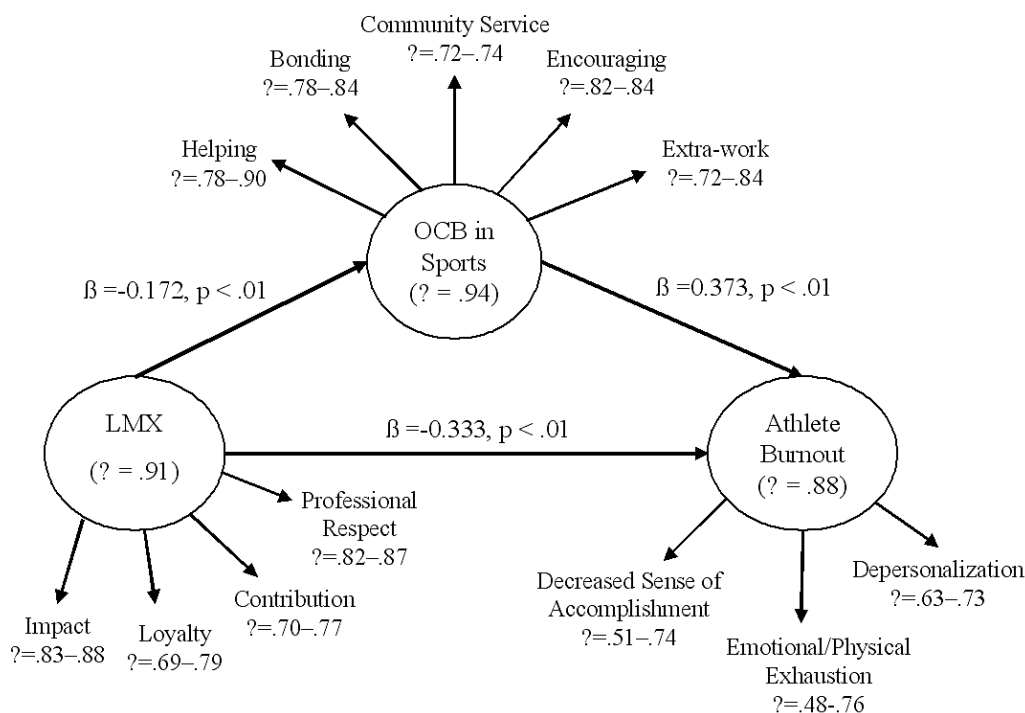


Figure 2. PLS-SEM results.

To further interpret the moderating effect of OCB, a simple slopes analysis was conducted (see Table 8):

Table 8. Simple slopes analysis of the relationship between coach–athlete interaction and athlete burnout at different levels of OCB.

	Original sample	Sample mean	Std. Dev.	t	p
LMX → Athlete Burnout OCB in Sports (at +1 SD)	-.505	-.518	.096	5.262	.000
LMX → Athlete Burnout OCB in Sports (at -1 SD)	-.161	-.172	.071	2.269	.023
LMX → Athlete Burnout OCB in Sports (at Mean)	-.333	-.345	.063	5.266	.000

To further interpret the moderating effect of OCB, a simple slopes analysis was conducted to examine the conditional effects of coach–athlete interaction on athlete burnout at low (–1 SD), mean, and high (+1 SD) levels of OCB (see Table 8 and Graph 1). The results indicate that the negative association between coach–athlete interaction and burnout was weakest at low levels of OCB and became progressively stronger at mean and high levels of OCB. Specifically, while coach–athlete interaction was negatively associated with burnout across all levels of OCB, the steepest negative slope was observed when athletes reported high levels of OCB. These findings suggest that athletes who more frequently engage in team-supportive, extra-role behaviours reported greater well-being benefits from high-quality coach–athlete interaction.

Figure 3 illustrates this moderating effect, showing how the slope of the relationship between coach–athlete interaction and athlete burnout steepens as OCB increases. This finding further supports the interpretation that higher levels of OCB were associated with a stronger negative association between coach–athlete interaction and burnout.

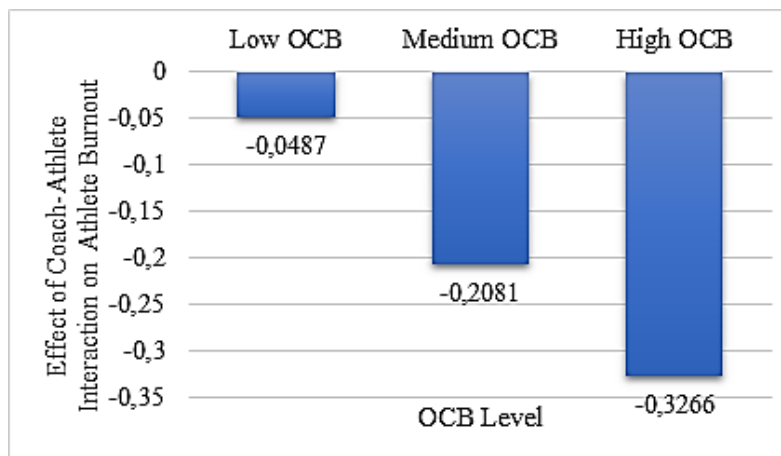


Figure 3. The moderating effect.

The interaction effect is illustrated conceptually, and the interpretation is supported by the simple slopes analysis presented in Table 8. The findings indicate that the negative association between coach–athlete interaction and burnout was stronger among athletes reporting higher levels of OCB than among those reporting lower levels of OCB. Accordingly, these findings may reflect that athletes reporting higher OCB also tend to report stronger connections with both their coach and teammates, alongside lower burnout levels. However, this interpretation should not be viewed as evidence of causality due to the cross-sectional design.

DISCUSSION

Theoretical contributions

This study contributes to coaching and sport science by showing that coach–athlete interaction quality is a robust relational correlate of athlete burnout in team sports. By applying an exchange-based lens to coaching relationships, the findings reinforce the practical value of relational coaching behaviours (e.g., trust building, individualized support, respectful communication) for sustaining athlete wellbeing. By situating coach–athlete interaction as a central relational mechanism within coaching practice, this study reinforces the relevance of exchange-based perspectives for understanding athlete burnout in real-world team sport environments.

A second contribution is the boundary-condition perspective on organizational citizenship behaviour in sport. Rather than treating OCB as uniformly beneficial, the study demonstrates that OCB shapes when coach–athlete interaction is most strongly associated with lower burnout. This aligns with contemporary discussions that ‘going above and beyond’ in sport can be both a resource and an expectation, highlighting the need to consider the normative context surrounding extra-role behaviour. In this respect, OCB appears to function as a boundary condition rather than a direct mechanism in the coach–athlete interaction–burnout relationship.

OCB as a conditional resource in coaching contexts

The moderation pattern suggests that athletes who frequently engage in team-supportive behaviours may benefit more from high-quality coach–athlete interaction when these behaviours are experienced as meaningful and self-endorsed. For coaches, this underscores a subtle but important distinction: encouraging constructive citizenship should not translate into moral pressure or assumed availability. Maintaining clarity about role expectations, recognizing effort without normalizing overcommitment, and monitoring signs of exhaustion may help ensure that extra-role contributions remain sustainable.

Taken together, these findings suggest that effective coaching is not only about fostering strong relationships and encouraging extra effort, but also about actively managing the boundaries of commitment within the team. Coaches who differentiate between required and discretionary contributions, and who explicitly legitimise recovery and personal limits alongside effort, may be better positioned to foster team environments associated with lower athlete burnout and sustained long-term engagement.

Managerial implications

From an applied coaching perspective, the results highlight two actionable levers. First, coaches should invest in relationship quality through consistent, autonomy-supportive communication, individualized feedback, and fair treatment, as relational quality is associated with lower burnout. Second, coaches and support staff should shape team norms so that helping and extra involvement remain genuinely voluntary. Practical steps include clarifying what is required versus optional, rotating informal responsibilities, publicly valuing recovery and boundaries, and checking in with athletes who regularly ‘do more’ to prevent accumulation of strain.

From a practical standpoint, these findings highlight that coaches should not only focus on building high-quality relationships with athletes but also remain attentive to how team norms shape the meaning of extra-role behaviours. Encouraging voluntary engagement while avoiding implicit pressure may be critical for preventing burnout in team sport environments.

Limitations and future research

This study has some limitations. First, the study employed a cross-sectional design based on convenience sampling and self-reported online questionnaires, which may limit the generalizability of the findings. Because

participation was voluntary and data were collected using self-report measures, the findings may be subject to selection bias, social desirability bias, and common method variance. Future studies are encouraged to adopt longitudinal and probability-based sampling designs to strengthen causal inference and external validity.

A further limitation concerns the interpretation of OCB in sport. Although the OCB-S scale captures team-supportive behaviours, it does not directly measure whether athletes perceive these behaviours as discretionary or as normative obligations. Future studies could incorporate perceived voluntariness, pressure, or role ambiguity to distinguish ‘healthy’ citizenship from compelled extra-role involvement.

Second, the study was conducted within a single country, which limits cross-cultural generalizability. In addition, the findings of this study are limited to Turkish team sports athletes over the age of 18. Future research should consider comparative designs that include multicultural and different age ranges to produce broader and more generalizable insights.

In addition, athletes were surveyed as individuals, yet team sports are inherently nested (athletes within teams and coaches). Future research could use multilevel designs to capture team- and coach-level effects (e.g., coaching climate, team norms) and to test whether the observed relationships vary across teams, sports branches, or competitive levels.

Thirdly, although Harman’s single-factor test indicated potential common method variance (CMV), this test has been widely criticized for its limited sensitivity in detecting CMV. Therefore, the results should be interpreted with caution. Future studies are encouraged to adopt procedural and statistical remedies (e.g., marker variables, longitudinal designs) to better control for CMV. OCB achieved a score of 62.04%, LMX 60.59%, and Athlete Burnout 43.19%, and when all items were evaluated and tested as a single scale, a score of 35.62% was obtained. Therefore, these findings should be interpreted with caution, and the potential influence of common method variance is acknowledged as a limitation of the study.

Additionally, factors such as work-life balance (e.g., family support, work-family role conflicts) and coach support may also contribute to athlete burnout. Future studies are encouraged to incorporate these variables into research models. Furthermore, examining negative aspects of organizational behaviour—such as compulsory citizenship behaviour, presenteeism, and absenteeism—within sports contexts and across specific sports disciplines could provide a more comprehensive understanding of the dynamics between athletes and coaches.

CONCLUSION

The findings indicate that higher-quality coach–athlete interaction is associated with lower athlete burnout in team sports. Athletes who reported better interaction with their coach also reported higher levels of team-supportive (citizenship) behaviours, and those behaviours were linked to lower burnout.

Consistent with a boundary-condition view, athletes’ OCB strengthened the negative association between coach–athlete interaction and burnout. The findings suggest that higher-quality coach–athlete interaction is associated with lower athlete burnout, particularly when extra-role contributions remain sustainable and are not driven by implicit obligation. Future research should continue to examine how team norms and perceived voluntariness shape the benefits and costs of citizenship behaviour in sport.

AUTHOR CONTRIBUTIONS

All authors meet the criteria for authorship in accordance with established ethical guidelines. Contributions are specified according to the CRediT (Contributor Roles Taxonomy) as follows: Conceptualisation: Acelya Telli, Serdar Bozkurt. Methodology: Acelya Telli, Serdar Bozkurt. Formal analysis: Acelya Telli. Investigation: Acelya Telli. Data curation: Acelya Telli. Writing – original draft: Acelya Telli. Writing – review & editing: Acelya Telli, Serdar Bozkurt. Supervision: Serdar Bozkurt.

All authors have critically reviewed and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

CONFLICT OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this manuscript.

AI USE DISCLOSURE

In accordance with current publishing ethics and transparency recommendations, artificial intelligence (AI) tools were used solely to assist with translation and language editing, with the aim of improving clarity and readability. No AI tools were used in the generation of scientific content, including the study design, data collection, analysis, interpretation of results, or the formulation of conclusions. The authors retain full responsibility for the content of the manuscript and confirm its originality, integrity, and accuracy.

ETHICAL CONSIDERATIONS

Ethical approval for this study was obtained on 18.02.2025 from the Istanbul Esenyurt University Ethics Committee (Approval No. 2025/01). All procedures were conducted in accordance with the ethical standards of the Declaration of Helsinki.

CONSENT TO PARTICIPATE

Informed consent to participate was obtained from all participants prior to data collection.

DATA AVAILABILITY

The data that support the findings of this study are not publicly available due to ethical and confidentiality considerations but are available from the corresponding author upon reasonable request.

REFERENCES

- Baş, T., Keskin, N., & Mert, İ. S. (2010). Leader-member exchange (LMX) model and validity and reliability of its instrument in Turkish. *Ege Academic Review*, 10(3), 1013–1039.
<https://doi.org/10.21121/eab.2010319626>

- Brown, L. A., & Roloff, M. E. (2015). Organizational citizenship behaviour, organizational communication, and burnout: The buffering role of perceived organizational support and psychological contracts. *Communication Quarterly*, 63(4), 384–404. <https://doi.org/10.1080/01463373.2015.1058287>
- Büyükbasmacı, Y. E. (2024). Effect of coach-athlete relationship on athlete burnout. *International Journal of Turkish Sport and Exercise Psychology*, 4(2), 63–75. <https://doi.org/10.55376/ijtsep.1590008>
- Cahyono, T., Hartono, F. V., Gani, R. A., Ahmedov, F., Sliz, M., Lobo, J., Kurtoğlu, A., Nasurudin, E., Tannoubi, A., Raman, A., & Setiawan, E. (2023). Coach leadership style, coach-athlete relationships and engagement in team sports: The mediating role of athlete burnout. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 18(6), 687–692. <https://www.riped-online.com/articles/coach-leadership-style-coachathlete-relationships-and-engagement-in-team-sports-the-mediating-role-of-athlete-burnout.pdf>
- Chelladurai, P. (2006). *Human resource management in sport and recreation* (2nd ed.). Human Kinetics.
- Chiu, S. F., & Tsai, M. C. (2006). Relationships among burnout, job involvement, and organizational citizenship behaviour. *The Journal of Psychology*, 140(6), 517–530. <https://doi.org/10.3200/JRLP.140.6.517-530>
- Choi, H., Jeong, Y., & Kim, S. (2020). The relationship between coaching behaviour and athlete burnout: Mediating effects of communication and the coach-athlete relationship. *International Journal of Environmental Research and Public Health*, 17, Article 8618. <https://doi.org/10.3390/ijerph17228618>
- Davis, L., Appleby, R., Davis, P., Wetherell, M., & Gustafsson, H. (2018). The role of coach-athlete relationship quality in team sport athletes' psychophysiological exhaustion: Implications for physical and cognitive performance. *Journal of Sports Sciences*, 36(17), 1985–1992. <https://doi.org/10.1080/02640414.2018.1429176>
- Davis, L., Jowett, S., Sörman, D., & Ekelund, R. (2023). The role of quality relationships and communication strategies for the fulfillment of secure and insecure athletes' basic psychological needs. *Journal of Sports Sciences*, 40(21), 1–13. <https://doi.org/10.1080/02640414.2022.2162240>
- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 84–108). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195399820.013.0006>
- Dekas, K. H., Bauer, T. N., Welle, B., Kurkoski, J., & Sullivan, S. (2013). Organizational citizenship behaviour, version 2.0: A review and qualitative investigation of OCBs for knowledge workers at Google and beyond. *Academy of Management Perspectives*, 27(3), 219–237. <https://doi.org/10.5465/amp.2011.0097>
- Dienesch, R., & Liden, R. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, 11(3), 618–634. <https://doi.org/10.5465/amr.1986.4306242>
- Dixon, D. (2021). Examining burnout, leader member exchange quality, experience, and OCB in registered nurses [Doctoral dissertation, Northcentral University].
- do Nascimento Junior, J. R. A., da Silva, E. C., Freire, G. L. M., Granja, C. T. L., da Silva, A. A., & de Oliveira, D. V. (2020). Athlete's motivation and the quality of his relationship with the coach. *Apunts. Educación Física y Deportes*, 142, 21–28. [https://doi.org/10.5672/apunts.2014-0983.es.\(2020/4\).142.03](https://doi.org/10.5672/apunts.2014-0983.es.(2020/4).142.03)
- Eby, L. T., Butts, M. M., Hoffman, B. J., & Sauer, J. B. (2015). Cross-lagged relations between mentoring received from supervisors and employee OCBs: Disentangling causal direction and identifying boundary conditions. *Journal of Applied Psychology*, 100(4), 1275–1285. <https://doi.org/10.1037/a0038628>
- Ellinger, A. D., & Cseh, M. (2007). Contextual factors influencing the facilitation of others' learning through everyday work experiences. *Journal of Workplace Learning*, 19(7), 435–452. <https://doi.org/10.1108/13665620710819384>
- Fan, F., Chen, J., Chen, Y., Li, B., Guo, L., Shi, Y., Yang, F., Yang, Q., Yang, L., Ding, C., & Shi, H. (2023). How relationship-maintenance strategies influence athlete burnout: Mediating roles of coach-athlete relationship and basic psychological needs satisfaction. *Frontiers in Psychology*, 13, Article 1104143. <https://doi.org/10.3389/fpsyg.2022.1104143>
- Fletcher, D., & Wagstaff, C. R. D. (2009). Organizational psychology in elite sport: Its emergence, application and future. *Psychology of Sport and Exercise*, 10, 427–434. <https://doi.org/10.1016/j.psychsport.2009.03.009>

- Foulds, S. J., Hoffmann, S. M., Hinck, K., & Carson, F. (2019). *The coach-athlete relationship in strength and conditioning: High performance athletes' perceptions*. *Sports*, 7(12), Article 244. <https://doi.org/10.3390/sports7120244>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference (4th ed.)*. Allyn & Bacon.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years. *The Leadership Quarterly*, 6, 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Gu, S., Peng, W., Du, F., Fang, X., Guan, Z., He, X., & Jiang, X. (2023). Association between coach-athlete relationship and athlete engagement in Chinese team sports: The mediating effect of thriving. *PLoS ONE*, 18(8), e0289979. <https://doi.org/10.1371/journal.pone.0289979>
- Güner, O., & Işık, U. (2023). Sporda örgütsel vatandaşlık davranışı ölçeğinin Türk kültürüne uyarlanması: Geçerlik ve güvenirlik çalışması. *Sportive*, 6(2), 111–125. <https://doi.org/10.53025/sportive.1349799>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31, 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Evaluation of reflective measurement models. In Partial least squares structural equation modeling (PLS-SEM) using R*. Springer. https://doi.org/10.1007/978-3-030-80519-7_4
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55. <https://doi.org/10.1080/10705519909540118>
- Jabeen, F., Farooq, Z. H., Al Nahyan, M. T., Stachowicz-Stanusch, A., & Tripathi, S. K. (2021). Athlete leadership and team performance: Moderating role of organizational citizenship behavior and mediating role of team cohesion and work passion. *Indian Journal of Economics and Business*, 20(4), 189–214.
- Jin, H., Kim, S., Love, A., & Jin, Y. (2022). Effects of leadership style on coach-athlete relationship, athletes' motivations, and athlete satisfaction. *Frontiers in Psychology*, 13, Article 1012953. <https://doi.org/10.3389/fpsyg.2022.1012953>
- Jowett, S. (2007). Interdependence analysis and the 3+1Cs in the coach-athlete relationship. In S. Jowett & D. Lavallee (Eds.), *Social psychology in sport* (pp. 15–27). Human Kinetics. <https://doi.org/10.5040/9781492595878.ch-002>
- Keleşek, S., Kara, F. M., Kazak Çetinkalp, Z., & Aşçı, H. (2016). Sporcu tükenmişliği ölçeğinin Türkçe uyarlaması. *Hacettepe Journal of Sport Sciences*, 27(4), 149–161. <https://doi.org/10.17644/sbd.311371>
- Kim, S., Liu, J., Love, A., & Park, S. (2022). Organizational citizenship behaviour in sport: Scale development and validation. *International Journal of Sports Science & Coaching*, 17(5), 1018–1032. <https://doi.org/10.1177/17479541211054246>
- Leduc, J. G., Boucher, F., Marques, D. L., & Brunelle, E. (2024). Basic psychological need satisfaction of collegiate athletes: The unique and interactive effects of team identification and LMX quality. *Frontiers in Sports and Active Living*, 6, Article 1342995. <https://doi.org/10.3389/fspor.2024.1342995>
- Lee, S., Kwon, S., Jang, D., & Kwon, H. (2023). The effect of coach-athlete fit on the coach-athlete relationship in team sport: Role of trust in coach. *International Journal of Sports Science & Coaching*, 18(4), 986–993. <https://doi.org/10.1177/17479541231164771>
- Li, J., Chen, B., & Zhang, Y. (2021). Adopting evaluative conditioning to improve coach-athlete relationships. *Frontiers in Psychology*, 12, Article 751990. <https://doi.org/10.3389/fpsyg.2021.751990>
- Li, Y., You, H., & Oh, S. (2024). A study on the structural relationship between emotional labor, job burnout, and turnover intention among office workers in Korea: The moderated mediating effect of leader-member exchange. *BMC Psychology*, 12, Article 54. <https://doi.org/10.1186/s40359-024-01545-8>
- Love, A., & Kim, S. (2019). Organizational citizenship behaviours in sport: A perspective from athletes. *Journal of Sport Management*, 33(1), 25–36. <https://doi.org/10.1123/jsm.2018-0036>

- Nicholls, A. R., Madigan, D. J., & Earle, K. (2022). *Multi-wave analyses of coping, athlete burnout, and well-being among FA Premier League academy players*. *Frontiers in Psychology*, 13, Article 979486. <https://doi.org/10.3389/fpsyg.2022.979486>
- Olsson, L. F., Madigan, D. J., Hill, A. P., & Grugan, M. C. (2022). *Do athlete and coach performance perfectionism predict athlete burnout?* *European Journal of Sport Science*, 22(7), 1073–1084. <https://doi.org/10.1080/17461391.2021.1916080>
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviours: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513–563. <https://doi.org/10.1177/014920630002600307>
- Raedeke, T. D., & Smith, A. L. (2001). Development and preliminary validation of an athlete burnout measure. *Journal of Sport & Exercise Psychology*, 23, 281–306. <https://doi.org/10.1123/jsep.23.4.281>
- Shang, Y., & Yang, S. Y. (2021). *The effect of social support on athlete burnout in weightlifters: The mediation effect of mental toughness and sports motivation*. *Frontiers in Psychology*, 12, Article 649677. <https://doi.org/10.3389/fpsyg.2021.649677>
- Simons, E. E., & Bird, M. D. (2023). Coach-athlete relationship, social support, and sport-related psychological well-being in NCAA Division I student-athletes. *Journal for the Study of Sports and Athletes in Education*, 17(3), 191–210. <https://doi.org/10.1080/19357397.2022.2060703>
- Standage, M., & Ryan, R. M. (2020). *Self-determination theory in sport and exercise*. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (4th ed., pp. 37–56). Wiley. <https://doi.org/10.1002/9781119568124.ch3>
- Stephen, S. A., Habeeb, C. M., & Arthur, C. A. (2022). *Congruence of efficacy beliefs on the coach-athlete relationship and athlete anxiety*. *Psychology of Sport and Exercise*, 58, Article 102062. <https://doi.org/10.1016/j.psychsport.2021.102062>
- Stirling, A. E., & Kerr, G. A. (2009). Abused athletes' perceptions of the coach-athlete relationship. *Sport in Society*, 12(2), 227–239. <https://doi.org/10.1080/17430430802591019>
- Vapur, M., Yavuz, E., & Demirel, M. A. (2023). İşgörenlerde örgütsel vatandaşlık davranışı ile tükenmişlik ilişkisinde etkileşimli liderliğin aracı rolü. *Ucuncu Sektör Sosyal Ekonomi Dergisi*, 58(1), 545–558. <https://doi.org/10.15659/3.sektor-sosyal-ekonomi.23.03.1966>
- Wilczyńska, D., Qi, W., Jaenes, J. C., Alarcón, D., Arenilla, M. J., & Lipowski, M. (2022). *Burnout and mental interventions among youth athletes: A systematic review and meta-analysis*. *International Journal of Environmental Research and Public Health*, 19(17), Article 10662. <https://doi.org/10.3390/ijerph191710662>



This work is licensed under a [Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/) (CC BY-NC-SA 4.0 DEED).